PROPOSED TECHNICAL PURCHASE DESCRIPTION (TPD) FOR RINSE ADDITIVES

1. Scope

This technical description (TPD) covers a low-foaming solid or liquid rinse additive concentrate for use in the final rinse cycle of a mechanical dishwashing machine equipped with a suitable rinse injector device for Navy shipboard application.

2. Units of Issue

1. Four (4) one (1) gallon bottles per case.
2. One (1) Two (2) pound pack
3. Two (2) Two (2) pound packs.

(Suggested units of issue. Other units of issue will also be considered and not limited to the units listed below.)

3. Requirements

3.1 Material

The rinse additive shall consist of wetting agents, combined with or without a defoamer, as necessary, to meet the requirements of this TPD. The rinse additive shall be suitable for use in a commercial dishwasher machine.

3.2 Appearance

The rinse additive shall be distinctly colored with a stable colorant so that the liquid level in the rinse additive reservoir in the dishwashing machine will be readily visible.

3.3 pH

A 1.0% by volume distilled water solution of rinse additive shall have a pH value not less than 5.5 nor more than 8.5 when tested as specified in ASTM E 70.

3.4 Cleaning Efficiency

When prepared as directed on the label, the rinse additive solution shall have a cleaning efficiency comparison index of not less than 3 when tested in accordance with ASTM D 3556 - 85. (Other commercially acceptable test methods may be considered as an alternate.)

3.5 Prohibited Materials

3.5.1 Excluded Ingredients

The rinse additive shall contain no ethylene glycol.

3.5.2 Phosphate

Elemental Phosphorous in the rinse additive shall not exceed 0.5% by weight when diluted in accordance with the manufacturer’s label.

3.4.3 Carcinogens and Toxins

The materials used in the rinse additive shall not contain any known or suspected human carcinogens in concentrations equal to or greater than 0.1% (by weight) as defined in: Code of Federal Regulations 29 CFR 1910.1000 Series, Occupational Safety and Health Administration (OSHA) Subpart Z Regulated Carcinogens/Toxic and Hazardous Substance List (latest edition); International Agency for Research on Cancer (IARC) Groups 1, 2A, and 2B (latest edition); and the latest annual report of the National Toxicology Program's (NTP) of Known to be Human Carcinogens, and Reasonably Anticipated to be Human Carcinogens.

3.4.4 Reproductive Hazards

The materials used in the rinse additive shall not contain the following occupational reproductive hazardous chemicals if used in concentrations equal to or greater than 0.1 percent (by weight): acetohydroxamic acid, aminopterin, arsenic, benomyl, benzene, bromoxynil, cadmium, carbon disulfide, carbon monoxide, chlordecone, cyanazine, cycloheximide, cyhexatin, dinocap, dinoseb, 1,2-dibromo-3-chloropropane, m-dinitrobenzene, o-dinitrobenzene, p-dinitrobenzene, epichlorohydrin, ethylene glycol monoethyl ether, ethylene glycol monoethyl ether acetate, ethylene glycol monomethyl ether, ethylene monomethyl ether acetate, ethylene oxide, hexachlorobenzene, hydroxurea, lead, mercury and mercury compounds, methyl bromide, methyl mercury, nickel carbonyl, polybrominated biphenyls, polychlorinated biphenyls, 2,3,7,8-tetrachloro-dibenzo-para-dioxin, toluene, and warfarin and any other chemical species listed in OPNAVINSTR 5100.23, Chapter 29, Appendix 29-B. The most current version of the instruction can be obtained from the internet website: http://www.navosh.net.

3.4.5 Hazardous Waste

The material used in the rinse additive shall not be classified as hazardous waste in accordance with 40CFR 261.

3.5 Preferable Characteristics

A product not containing alkyl phenyl ethoxylates (APEs) will be favored over products that do contain them. The acceptance of products that contain these chemicals for shipboard application will be dependent on the amount present in the listed formulation.

3.6 Biodegradability

The synthetic detergent in the rinse additive shall be 90 percent (minimum) biodegradable when tested as specified below:

3.6.1 Anionic Synthetic detergents

When the detergent is an alkyl benzene sulfonate or a linear alkylate sulfonate, the biodegradability shall be determined in accordance with the Test Procedure and Standards, ABS and LAS Biodegradability Scientific and Technical Report No. 3 of the Soap and Detergent Association.

3.6.2 Nonionic and Other Synthetic Detergents

The synthetic detergent shall be determined for biodegradability in accordance with the Status of Biodegradability Testing of Nonionic Surfactant Scientific and Technical Report No. 6 of the Soap and Detergent Association.

(Other commercially acceptable test methods may be considered as an alternate. If historic documentation for the biodegradability test is available for the individual components of the product formulation, this information will also be accepted in lieu of the specified cleaning product.)

3.7 Shelf Life and Maximum Age on Delivery

The product shall have a minimum shelf life of 36 months and be no greater than 5 months from the manufacturing date when received by the supply system.

3.7 Containment and Labeling

The rinse additive shall be furnished in new, non-returnable, commercial type, factory-sealed containers. All containers shall be labeled with labeling impervious to the contents of the container. Labeling can be accomplished by printing directly on the container or by attaching a paper label or tight-fitting sleeve-type on a plastic container designed to receive and hold sleeve-type labels. Labels shall not be easily removed from the container. Labels shall give adequate use instructions and toxicity warning, skin irritants, if applicable. Labels shall meet all federal regulation requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard in 29 CFR 1910.200 and the Federal Hazardous Substances Act.
Each container shall be durable and legibly marked with directions for use and the following precautions:

Caution: May be Harmful if Swallowed. Avoid contact with eyes. If concentrated liquid is splashed in eyes, flush thoroughly with water and seek medical attention. If swallowed, drink large amounts of water, induce vomiting and seek medical attention.

3.8 Aquatic Toxicity

The product shall not be toxic to aquatic life as measured by test methods found in 40 CFR Part 797, Subpart B, and determined by meeting the following three criteria for acute (Daphnia or fish), actuate (algae), and chronic (Daphnia) effects:
Acute: EC50 Daphnia (48 hr.) >10mg/L; or LC50 fish (96hr.) > 10 mg/L.
Acute: E50 algae (96 hrs) > 10 mg/L
Chronic: EC50 Daphnia (21-day or > 10 mg/L 15 day minimum).

3.9 Material Safety Data Sheets (MSDSs)

The contracting activity shall be provided a material safety data sheet with each contract bid/proposal or prior to contract award. The MSDS shall be provided in accordance with the requirements of FED-STD-313 and 29 CFR 1910.1200, Hazardous Communication Standard. The MSDS shall be included with each shipment of the material covered by this TPD. The MSDS must be current version for the product.

4. Regulatory Requirements

4.1 Environmental Considerations
The product delivered under this TPD shall be in accordance with the environmental requirements of 40 CFR.

4.2 Volatile Organic Compounds (VOCs)
VOC levels of the product must be stated as a % of VOCs by weight when prepared in the dilution ratio as directed on the manufacturer's label and shall not exceed 10% in accordance with 40 CFR parts 9 and 59.

4.3 EPA Requirements
Product must meet applicable federal specifications as specified in the Food Quality Management Act. In order to be safely used on food processing equipment, utensils, and other food contact articles, the product shall be used only as specified by the manufacturer.

5. Quality Assurance Provisions

5.1 Contractor Certification
The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this TPD and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices and is the same product offered for sale in the commercial market place. The Government reserves the right to require proof of such conformance prior to first delivery, and thereafter as may be otherwise provided for under the provisions of the contract.

5.2 Market Acceptability
The following market acceptability criteria are necessary to document the quality of the product to be provided under this TPD:

1. The company furnishing the product must have been producing a product meeting the requirements of this technical purchase description for at least 6 months.

2. The Government reserves the right to require proof of such conformance.

6. Packaging

6.1 Preparation for Delivery
The item(s) shall be packaged and packed in accordance with the latest revision of ASTM D 3951, Standard Practice for Commercial Packaging unless specified in the contract or purchase.

7. Source of Documents

7.1 Copies of the Code of Federal Regulation (CFR) and Federal Acquisition Regulation (CFR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington DC, 0402.
Website:http://www.access.gpo.gov/nara/cf/cfr/cfc-table-search.html

7.2 Copies of Federal Standards and Specifications may be obtained from the Standardization Document Order Desk, 700 Robbins Avenue. Website: http:/www.dodssp.daps.mil.

7.3 Copies of ASTM test methods may be obtained form the American Society for Testing and Materials, 100 Barr harbor Drive, West Conshohocken, PA 19428-2959. Website: ww.astm.org.

7.4 Copies of the most recent Annual Report on Carcinogens may be obtained from the U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program, P.O. Box 12233, Research Triangle Park, NC 27709. Website: HYPERLINK http://ntp-server.niehs.nih.gov/NewHomeRoc/AboutRoC.html

7.5 Copies of all IARC publications are available directly form IARC PRESS, 150 Cours Albert Thomas, F-69372 Lyon cedex 08, France (Fax: +33 472 73 83 02; E-mail press@iarc.fr)

7.6 Copies of Public Law 95-580 “Resource Conservation & Recovery Act” (RCA) may be obtained from Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402.

7.7 Copies of EPA/OPPTS test methods may be obtained directly from EPA Website: www.epa.gov/opptsfrs/home/opptism.htm.

7.8 Copies of the biodegradability tests may be obtained from the Soap and Detergent Association, 475 Park Avenue South, New York, NY 10016. (from website: 1500 K Street, NW Suite 300 Washington, DC 20005)